We Claim:

1. A system for treating a physiologic fluid drawn from an individual elsewhere than the blood circulatory system, comprising a flow path adapted to draw a physiologic fluid from a targeted body region for circulation outside the individual and return to the targeted body region, and a device communicating with the flow path to remove cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators from the physiologic fluid.

2. A system according to claim 1 wherein the physiologic fluid includes peritoneal dialysis solution.

3. A system according to claim 1 wherein the physiologic fluid includes lymphatic fluid.

4. A system according to claim 1 wherein the physiologic fluid includes synovial fluid.

5. A system according to claim 1 wherein the physiologic fluid includes cerebrospinal fluid.

6. A system according to claim 1 wherein the physiologic fluid includes spinal fluid.

7. A system according to claim 1 wherein the device includes an adsorption medium to remove cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators.

8. A system according to claim 7 wherein the adsorption medium is characterized by a Biocompatibility Index of not greater than 14.

9. A system according to claim 8 wherein the Biocompatibility Index is not greater than 7.

10. A system according to claim 1 wherein the device includes an adsorption medium to remove cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators, the adsorption medium comprising a polymeric material.

11. A system according to claim 10 wherein the polymeric material comprises particles prepared by polymerization or copolymerization of a monomer selected from a group consisting of styrene, ethylstyrene, α-methylstyrene, divinylbenzene, di isopropenyl benzene, trivinylbenzene, and alkyl methacrylate.

12. A system according to claim 10 wherein the polymeric material comprises particles formed from crosslinked polystyrene-type resins having a surface modified to minimize activation of blood complement system.

13. A system according to claim 10 wherein the polymeric material comprises particles formed from a porous hydrophobic divinylbenzene copolymer having a surface modified to include surface exposed functional groups selected from the group of polymers of 2-hydroxyethyl methacrylate, N-vinylpyrrolidine, N-vinylcaprolactame and N-acrylamide.

14. A system according to claim 10 wherein the polymeric material comprises particles formed by polymerization of aromatic divinyl compounds or their copolymerization with aromatic monovinyl compounds in the presence of porogens or mixtures of porogens with properties close to those of θ-solvents.

15. A system for conducting peritoneal dialysis comprising a source of peritoneal dialysis solution, and a device communicating with the source for removing cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators from the peritoneal dialysis

solution.

16. A system according to claim 15 wherein the source regenerates peritoneal dialysis solution from spent peritoneal dialysis solution.

17. A system for preserving an organ for transplantation comprising a source of organ preservation solution, and a device communicating with the source for removing cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators from the organ preservation solution.

18. A system according to claim 15 or 17 wherein the device includes an adsorption medium to remove cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators.

19. A system according to claim 18 wherein the adsorption medium is characterized by a Biocompatibility Index of not greater than 14.

20. A system according to claim 19 wherein the Biocompatibility Index is not greater than 7.

21. A system according to claim 15 or 17 wherein the device includes an adsorption medium to remove cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators, the adsorption medium comprising a polymeric material.

22. A system according to claim 21 wherein the polymeric material comprises particles prepared by polymerization or copolymerization of a monomer selected from a group consisting of styrene, ethylstyrene, α-methylstyrene, divinylbenzene, di isopropenyl benzene, trivinylbenzene, and alkyl methacrylate.

23. A system according to claim 21 wherein the polymeric material comprises particles formed from crosslinked polystyrene-type resins

having a surface modified to minimize activation of blood complement system.

24. A system according to claim 21

wherein the polymeric material comprises particles formed from a porous hydrophobic divinylbenzene copolymer having a surface modified to include surface exposed functional groups selected from the group of polymers of 2-hydroxyethyl methacrylate, N-vinylpyrrolidine, N-vinylcaprolactame and N-acrylamide.

25. A system according to claim 21

wherein the polymeric material comprises particles formed by polymerization of aromatic divinyl compounds or their copolymerization with aromatic monovinyl compounds in the presence of porogens or mixtures of porogens with properties close to those of θ-solvents.

26. A system for treating a physiologic fluid drawn from an individual comprising

means for drawing a physiologic fluid from a targeted body region elsewhere than the blood circulatory system,

means for circulation the physiologic fluid outside the individual for return to the targeted body region, and

means for removing cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators from the physiologic fluid during the circulation.

27. A system according to claim 26

wherein the physiologic fluid includes peritoneal dialysis solution.

28. A system according to claim 26

wherein the physiologic fluid includes lymphatic fluid.

29. A system according to claim 26

wherein the physiologic fluid includes synovial fluid.

30. A system according to claim 26 wherein the physiologic fluid includes cerebrospinal fluid.

31. A system according to claim 26 wherein the physiologic fluid includes spinal fluid.

32. A system according to claim 26 wherein the means for removing includes an adsorption medium to remove cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators.

33. A system according to claim 32 wherein the adsorption medium comprises a polymeric material.

34. A system according to claim 33 wherein the polymeric material comprises particles prepared by polymerization or copolymerization of a monomer selected from a group consisting of styrene, ethylstyrene, α-methylstyrene, divinylbenzene, di isopropenyl benzene, trivinylbenzene, and alkyl methacrylate.

35. A system according to claim 33 wherein the polymeric material comprises particles formed from crosslinked polystyrene-type resins having a surface modified to minimize activation of blood complement system.

36. A system according to claim 33 wherein the polymeric material comprises particles formed from a porous hydrophobic divinylbenzene copolymer having a surface modified to include surface exposed functional groups selected from the group of polymers of 2-hydroxyethyl methacrylate, N-vinylpyrrolidine, N-vinylcaprolactame and N-acrylamide.

37. A system according to claim 33 wherein the polymeric material comprises

particles formed by polymerization of aromatic divinyl compounds or their copolymerization with aromatic monovinyl compounds in the presence of porogens or mixtures of porogens with properties close to those of θ-solvents.

38. A method for treating a physiologic fluid drawn from an individual comprising the steps of

drawing a physiologic fluid from a targeted body region elsewhere than the blood circulatory system,

circulation the physiologic fluid outside the individual for return to the targeted body region, and

removing cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators from the physiologic fluid during the circulation.

39. A method according to claim 38 wherein the physiologic fluid includes peritoneal dialysis solution.

40. A method according to claim 38 wherein the physiologic fluid includes lymphatic fluid.

41. A method according to claim 38 wherein the physiologic fluid includes synovial fluid.

42. A method according to claim 38 wherein the physiologic fluid includes cerebrospinal fluid.

43. A method according to claim 38 wherein the physiologic fluid includes spinal fluid.

44. A method according to claim 38 wherein the removing step includes use of an adsorption medium to remove cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators.

45. A method according to claim 44 wherein the adsorption medium comprises a

polymeric material.

46. A method according to claim 45

wherein the polymeric material comprises particles prepared by polymerization or copolymerization of a monomer selected from a group consisting of styrene, ethylstyrene, α-methylstyrene, divinylbenzene, di isopropenyl benzene, trivinylbenzene, and alkyl methacrylate.

47. A method according to claim 45

wherein the polymeric material comprises particles formed from crosslinked polystyrene-type resins having a surface modified to minimize activation of blood complement system.

48. A method according to claim 45

wherein the polymeric material comprises particles formed from a porous hydrophobic divinylbenzene copolymer having a surface modified to include surface exposed functional groups selected from the group of polymers of 2-hydroxyethyl methacrylate, N-vinylpyrrolidine, N-vinylcaprolactame and N-acrylamide.

49. A method according to claim 45

wherein the polymeric material comprises particles formed by polymerization of aromatic divinyl compounds or their copolymerization with aromatic monovinyl compounds in the presence of porogens or mixtures of porogens with properties close to those of θ-solvents.

50. A method for conducting peritoneal dialysis comprising the steps of

circulating peritoneal dialysis solution from a source, and

removing cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators from the peritoneal dialysis solution during the circulations step.

51. A method according to claim 50

wherein the circulating step regenerates peritoneal dialysis solution from spent peritoneal dialysis solution.

52. A method for preserving an organ for transplantation comprising the steps of

circulating organ preservation solution into contact with an organ harvested for transplantation, and

removing cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators from the organ preservation solution during the circulation step.

53. A system according to claim 50 or 52

wherein the device includes an adsorption medium to remove cytokines or other species of pro-inflammatory or anti-inflammatory stimulators or mediators.

54. A method according to claim 53

wherein the adsorption medium comprises a polymeric material.

55. A method according to claim 53

wherein the polymeric material comprises particles prepared by polymerization or copolymerization of a monomer selected from a group consisting of styrene, ethylstyrene, α-methylstyrene, divinylbenzene, di isopropenyl benzene, trivinylbenzene, and alkyl methacrylate.

56. A method according to claim 53

wherein the polymeric material comprises particles formed from crosslinked polystyrene-type resins having a surface modified to minimize activation of blood complement system.

57. A method according to claim 53

wherein the polymeric material comprises particles formed from a porous hydrophobic divinylbenzene copolymer having a surface modified to include surface exposed functional groups selected from the group of

polymers of 2-hydroxyethyl methacrylate, N-vinylpyrrolidine, N-vinylcaprolactame and N-acrylamide.

58. A method according to claim 53 wherein the polymeric material comprises particles formed by polymerization of aromatic divinyl compounds or their copolymerization with aromatic monovinyl compounds in the presence of porogens or mixtures of porogens with properties close to those of θ-solvents.